

Patent Filing



US006459779B2

(12) United States Patent
Wardin et al.

(10) Patent No.: US 6,459,779 B2
(45) Date of Patent: Oct. 1, 2002

(54) SYSTEM AND METHOD FOR CREATING A BILLING RECORD WITH A CALLED PARTY'S NAME

(75) Inventors: William Konrad Wardin, Barrington; Melanie Louise Murphy, Oak Park, both of IL (US)

(73) Assignee: Ameritech Corporation, Hoffman Estates, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/148,935

(22) Filed: Sep. 4, 1998

(51) Int. Cl.⁷ H04M 15/00; H04M 1/56;
H04M 11/00

(52) U.S. Cl. 379/112.01; 379/114.03;
379/121.05; 379/116; 379/126; 379/142.01;
455/406

(58) Field of Search 379/112, 114,
379/115, 116, 119, 120, 121, 126, 112.01,
114.01, 114.03, 114.28, 115.01, 121.01,
121.05, 142.01, 142.04, 142.1, 201.01,
201.07; 455/405, 406, 407, 408

(56) References Cited

U.S. PATENT DOCUMENTS

3,995,117 A 11/1976 Fallon et al.
4,653,086 A * 3/1987 Laube
4,794,634 A * 12/1988 Torihata et al.
4,911,536 A * 3/1990 Ditzik
4,969,180 A * 11/1990 Wallerson et al.
4,979,207 A * 12/1990 Baum et al. 379/112
5,003,584 A * 3/1991 Benyacar et al. 379/119
5,157,717 A * 10/1992 Hitchcock
5,168,553 A * 12/1992 Okazaki et al.
5,218,632 A * 6/1993 Cool 379/126
5,249,220 A * 9/1993 Moskowitz et al.
RE34,476 E * 12/1993 Norwood
5,276,794 A * 1/1994 Lamb, Jr.

5,301,222 A * 4/1994 Fujiwara
5,303,312 A * 4/1994 Comerford et al.
5,381,467 A * 1/1995 Rosinski et al. 379/121
5,392,447 A * 2/1995 Schlack et al.
5,394,463 A * 2/1995 Fischell et al. 379/201
5,481,603 A * 1/1996 Gutierrez et al. 379/221
5,486,847 A * 1/1996 Ranf et al.
5,506,893 A * 4/1996 Buscher et al. 379/114
5,508,713 A * 4/1996 Okouchi
5,519,769 A * 5/1996 Weinberger et al. 379/112
5,521,986 A * 5/1996 Curtin, II et al.
5,546,538 A * 8/1996 Cobbley et al.
5,561,446 A * 10/1996 Montlick
5,594,787 A * 1/1997 Ohshima et al. 379/114

(List continued on next page.)

OTHER PUBLICATIONS

Austel, Consumer Reports: "Customer Telephone Billing", [Http://public.sma.gov.au/support/pubs/consumer/reports/CtsTeBil.htm](http://public.sma.gov.au/support/pubs/consumer/reports/CtsTeBil.htm), May 1997.*

"Customer Telephone Billing" <http://public.sma.gov.au/support/pubs/consumer/reports/CstTeBil.htm> (May 1997).

Primary Examiner—Curtis Kuntz

Assistant Examiner—Quoc Tran

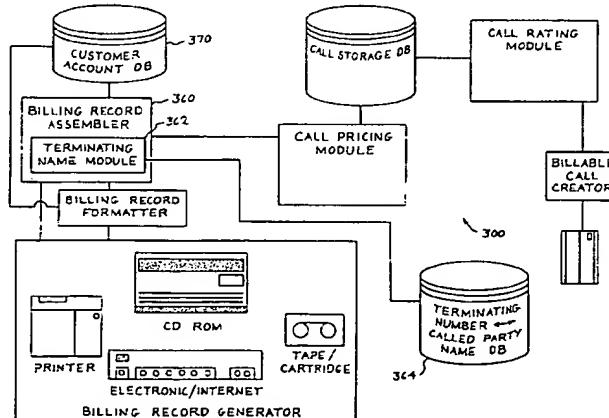
(74) Attorney, Agent, or Firm—Brinks Hofer Gilson & Lione

(57)

ABSTRACT

A method and system are provided for creating a billing record with a called party's name. Providing the called party's name on the billing record facilitates the calling party's review of the billing record by reducing the amount of time and effort needed to determine the identity of the called parties. In addition to identifying fraudulent and misbilled calls, the called party's name allows a person reviewing the billing record to quickly identify long distance calls, quickly discern business from personal calls, and audit calls made from phone lines with multiple users (e.g., employees or kids). Additionally, the billing record reviewer saves time and money by avoiding the need to call directory assistance or a billing service to identify the calls.

28 Claims, 7 Drawing Sheets



US-PAT-NO: 6459779

DOCUMENT-IDENTIFIER: US 6459779 B2

TITLE: System and method for creating a billing record with a called party's name

----- KWIC -----

Detailed Description Text - DETX (10):

In the system 300 of FIG. 3, the terminating name module 362 is part of the billing record assembler 360. The terminating name module can, however, be implemented in other parts of the billing system, and the eligible terminating numbers can be extracted from the call record that is present in that part of the system. For example, FIG. 5 shows a billing system 500 in which the terminating name module 552 is part of the call pricing module 550. By being part of the call pricing module 550, the terminating name module 552 can extract eligible terminating numbers from the call record present in the call pricing module 550 and can query the terminating-number-to-called-party's-name

database 554 to determine the called party's name during pricing when volume discounts, calling plans, and usage summaries are being calculated. In other alternatives, the terminating name module 632, 742 can be part of the call rating module 630 (as shown in FIG. 6) or the call storage database 740 (as shown in FIG. 7), and the eligible terminating numbers can be extracted from the call record in the call rating module 630 and call storage database 740, respectively. Since adding the called party's name to the call record may lengthen the call record, several components of the billing system may need to be modified accordingly. To introduce the least amount of intrusion into the billing system, it is preferred that the terminating name module be part of the billing record assembler, as shown in FIG. 3. Further, by being part of the billing record assembler, the terminating name module would be more responsive to those customers who activate or de-activate the service in the middle of a billing cycle (i.e., mid-month).